

AMENDMENTS TO THE DRAWINGS

Attached hereto is(are) two(2) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

In Figure 2, add reference numeral 55 and its lead line; and

In Figure 6, correct the spelling of the word "easy."

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 2-5 remain under consideration. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Drawings

The Examiner objected to the drawings as failing to show reference numeral 55. Applicants have now amended Figure 2 to add this reference numeral and the appropriate lead line.

The Examiner further objected to elements 211a and 211b not being shown in Figure 3a as described on page 6 of the specification. Applicants have amended the specification in this case to point out that these numerals are present in Figure 3b instead.

Objection to the Specification

The Examiner pointed out an error on page 7 of the specification, namely, that the second area is 211b. By way of the present amendment, this has also been corrected.

Objections to the Claims

Claim 4 was objected to for using the phrase "earth rare." This has been corrected to "rare earth" in claim 4 and also in the specification. Accordingly, this objection is overcome.

Rejection Under 35 U.S.C. § 112

Claims 4 and 5 stand rejected under 35 U.S.C. § 112 second paragraph as being indefinite due to improper Markush group terminology. This phrase has been corrected in both claims as suggested by the Examiner. Accordingly, this rejection is overcome.

Rejection Under 35 U.S.C. § 102

Claims 1 to 5 stand rejected under 35 U.S.C. § 102 as being anticipated by the article to Chappert et al. ("Planar Patterned Magnetic Media Obtained by Ion Irradiation, Science, Vol. 280, June 29, 1998). This rejection is respectfully traversed.

Regarding the rejection of claim 1, this claim has now been cancelled rendering this part of the rejection moot.

The Examiner rejected claim 2 as being anticipated by Chappert et al. and pointed out that reference teaches the patterning of a continuous magnetic film utilizing ion beam irradiation to form arrays of adjacent lines having different magnetic properties. In particular, the reference shows having perpendicular

versus in-plane magnetization. Applicants submit that claim 2 as presently amended is not anticipated by this article.

The claim now describes a magnetic film having a combination of elements, including a substrate, a magnetic layer having two areas, with one area having an easy axis in a first direction and a second area having a different easy axis in a different direction, with both directions being in the plane and being different from each other. While admittedly the reference teaches a cobalt-type platinum multilayer exposed to an ion beam of helium ions with adjoining regions having different magnetic properties, the particular magnetic properties described are different from those of the present claimed invention. Thus, claim 2 states that the first area has a first easy axis having a first direction in the plane in the magnetic layer. The second area has second easy axis in the second direction which is different from the first direction and is also in the plane of the magnetic layer. While the reference discusses changing magnetic properties in adjoining regions, it does not discuss the particular change of the easy axis. Accordingly, Applicants submit that claim 2 is not anticipated by this article. Further, Applicants submit that it would not be obvious to use this particular magnetic property since there is no indication in the reference that such a property can be used in adjoining areas. Accordingly, Applicants submit that claim 2 defines thereover.

Claims 3-5 depend from claim 2 and as such are also considered to be allowable. In addition, each of these claims recites additional features of the

invention. Claim 3 describes the angle difference between the two axes, which is not described in this reference. Claims 4 and 5 describe the particular materials of the magnetic film. Accordingly, Applicants submit that claims 3 through 5 are similarly allowable.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patent relied on by the Examiner. In view of this, reconsideration of the rejection and allowance of all the claims are respectfully requested.

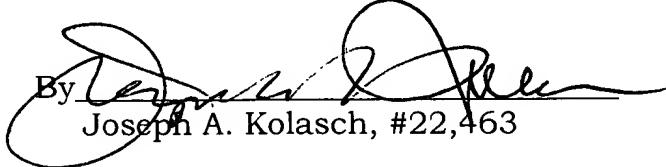
In the event that there are any outstanding matters remaining in this application, the Examiner is invited to contact Robert F. Gnuse at (703) 205-8000 in the Washington, D.C. area.

Pursuant to the provisions of 37 CFR 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application. The required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Joseph A. Kolasch, #22,463

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

JAK/RFG/glh/gf
2632-0142P

Attachments



Fig. 1
Conventional Art

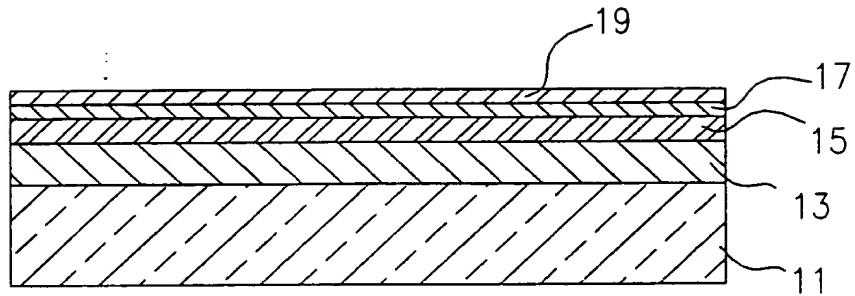
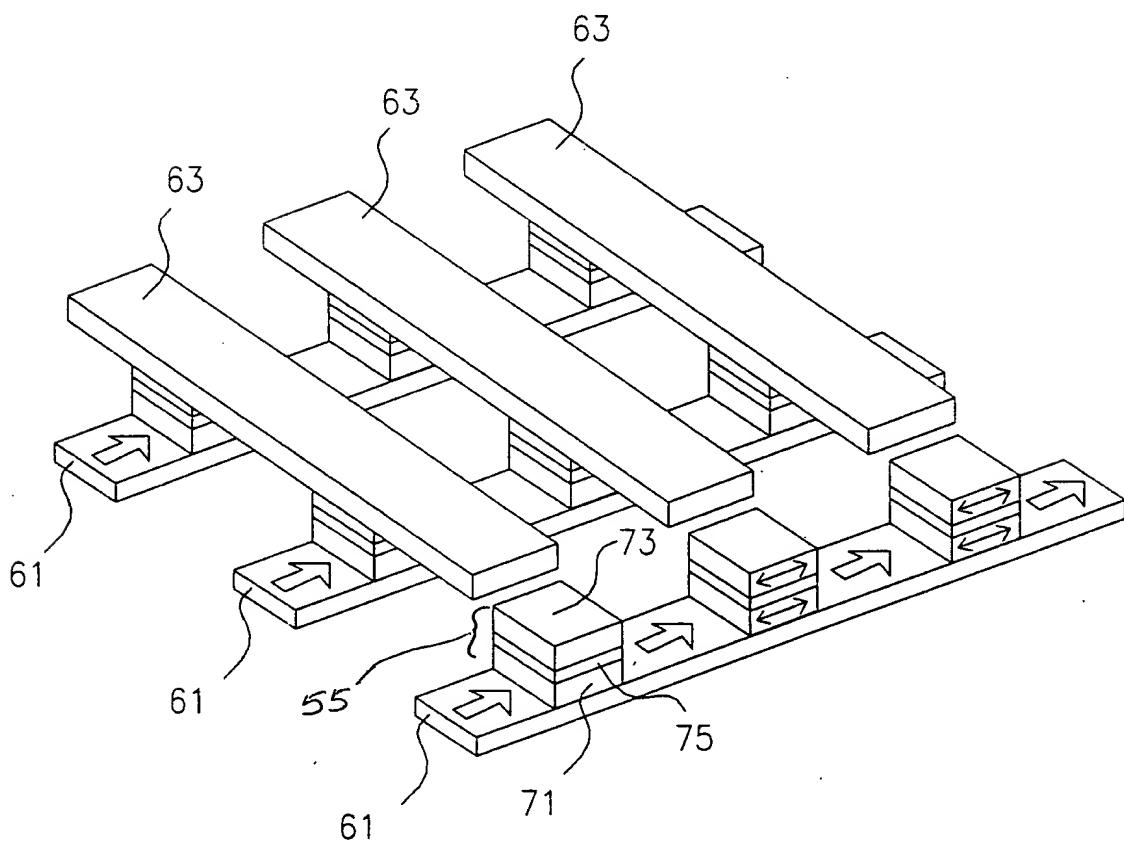


Fig. 2
Conventional Art



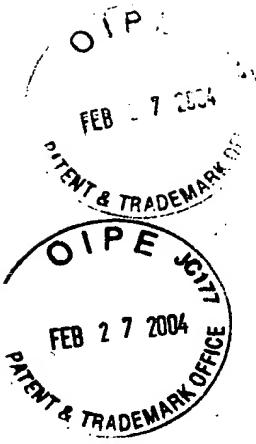


Fig. 6

